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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/544,735	04/07/2000	John Lynch	104005-0111	2317
24267	7590	11/03/2004	EXAMINER	
CESARI AND MCKENNA, LLP 88 BLACK FALCON AVENUE BOSTON, MA 02210			JAGANNATHAN, MELANIE	
			ART UNIT	PAPER NUMBER
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DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/544,735	Applicant(s) LYNCH ET AL.	
	Examiner Melanie Jagannathan	Art Unit 2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,3 and 5-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,5,7-14 and 17 is/are rejected.
- 7) ☒ Claim(s) 3,6,15,16,18 and 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 3 is objected to because of the following informalities: on line 25, after "system", bracket should be deleted. Appropriate correction is required.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 2, 17 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 and 13 of Hebert et al. U.S. Patent No. 5,920,546 in view of Phaal US 6,055,564. Claim 1 of US 5,920,546 discloses expandable telecommunications system including host for controlling operations of system, bus for carrying data to and from a plurality of ports teaches limitation of claims of instant application of expandable telecommunications system having a plurality of nodes with host to control system and switching nodes having switching buses for transmitting and receiving data and control information. Hebert et al. disclose switching nodes for dynamically connecting and disconnecting paths with respect to public and private network ports and means for establishing

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conference call with at least three conferees connected to one or more nodes where switching nodes transmit and receive packetized information including circuit switched data from any port of switching nodes is communicable to any node interfaced reads on claims of instant application which disclose switching nodes with means for connecting and disconnecting communication paths interfacing with PSTN and private networks, at least two of switching nodes being conferencing nodes able to perform a conference call between three or more conferees/participants, conferencing nodes able to switch communications, including conferenced output to any other port interfaced with system from PSTN and private networks.

Claim 17 of instant application discloses at least one conferencing node for providing conferencing services including interconnecting means and DSP circuits and means for whether a DSP circuit has available conferencing resources and sufficient available time slots is disclosed by at least one conferencing node which determines available conferencing resources and subsequently reserving sufficient conferencing resources and executing conference of claim 1 and conferencing node comprising nodal switch, transmitting and receiving means and multifunction DSP card containing conferencing resources and dedicated DSP bus structure of claims 10 and 13.

Hebert et al. does not disclose limitation of claim 2 of instant application teaching defining a requested conference as being one of a dynamic, critical and a static type, identifying the DSP circuit within a conferencing node that satisfies the greatest amount of available channels in system so that the conference can grow as large as possible. Phaal discloses a session in progress between a host side (Figure 1, element 15) and a client side (element 13) including individual personal computers each with a user. For newly received messages from

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additional users, not a part of the already established session, the resource monitor (element 27) determine whether messages can be admitted if the resources are available and the admission control gateway (element 25) admits the messages if there available time slots. See column 5, lines 17-27, lines 58-67 and column 6, lines 1-15. Phaal discloses a session-in-progress between users and users with priority receiving the maximum available capacity while non-priority users are deferred and their messages not transmitted. Phaal teaches the idea of assigning maximum available resources to a certain group, in this case priority communication between users and a host. See column 5, lines 58-67 and column 6, lines 1-15. At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the determination of conferencing resources of Hebert et al. with the method of Phaal of assigning maximum resources to a conference in progress so additional participants can join. One of ordinary skill in the art would be motivated to do so in order to accommodate several users and for efficient use of resources.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

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the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 2, 5, 7-13, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hebert et al. US 5,920,546 in view of Phaal US 6,055,564.

Regarding claims 2, 13, Hebert et al. disclose expandable telecommunications system including host for controlling operations of system, bus for carrying data to and from a plurality of ports teaches limitation of claims of instant application of expandable telecommunications system having a plurality of nodes with host to control system and switching nodes having switching buses for transmitting and receiving data and control information. Hebert et al. disclose switching nodes for dynamically connecting and disconnecting paths with respect to public and private network ports and means for establishing conference call, of static type, with at least three conferees connected to one or more nodes where switching nodes transmit and receive packetized information including circuit switched data from any port of switching nodes is communicable to any node interfaced reads on claims of instant application which disclose switching nodes with means for connecting and disconnecting communication paths interfacing with PSTN and private networks, at least two of switching nodes being conferencing nodes able to perform a conference call between three or more conferees/participants, conferencing nodes able to switch communications, including conferenced output to any other port interfaced with system from PSTN and private networks.

Claim 17 of instant application discloses at least one conferencing node for providing conferencing services including interconnecting means and DSP circuits and means for whether

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a DSP circuit has available conferencing resources and sufficient available time slots is disclosed by at least one conferencing node which determines available conferencing resources and subsequently reserving sufficient conferencing resources and executing conference of claim 1 and conferencing node comprising nodal switch, transmitting and receiving means and multifunction DSP card containing conferencing resources and dedicated DSP bus structure of claims 10 and 13.

Regarding claims 2 and 5, Hebert et al. disclose all of the limitations of the claims except for defining a requested conference as being one of a dynamic or critical type, employing user-defined parameters to determine conference type and identifying the DSP circuit within a conferencing node that satisfies the greatest amount of available channels in system so that the conference can grow as large as possible. Phaal discloses a session in progress between a host side (Figure 1, element 15) and a client side (element 13) including individual personal computers each with a user. For newly received messages from additional users, not a part of the already established session, the resource monitor (element 27) determine whether messages can be admitted if the resources are available and the admission control gateway (element 25) admits the messages if there available time slots. See column 5, lines 17-27, lines 58-67 and column 6, lines 1-15. Phaal discloses a session-in-progress between users and users with priority receiving the maximum available capacity while non-priority users are deferred and their messages not transmitted. Indicators of priority or class associated with messages from client can be assigned by the client itself. Phaal teaches the idea of assigning maximum available resources to a certain group, in this case priority communication between clients and a host. See column 2, lines 26-67, column 5, lines 58-67 and column 6, lines 1-15. At the time the invention was made it would

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have been obvious to a person of ordinary skill in the art to modify the determination of conferencing resources of Hebert et al. with the method of Phaal of assigning maximum resources to a conference in progress so additional participants can join. One of ordinary skill in the art would be motivated to do so in order to accommodate several users and for efficient use of resources.

Regarding claim 7, Hebert et al. disclose all the limitations of the claim except for a dynamic conference being defined as a conference likely to change in size based upon predetermined criteria. Phaal discloses a session in progress between a host side (Figure 1, element 15) and a client side (element 13) including individual personal computers each with a user. For newly received messages from additional users, not a part of the already established session, the resource monitor (element 27) determines whether messages can be admitted if the resources are available and the admission control gateway (element 25) admits the messages if there available time slots. See column 5, lines 17-27, lines 58-67 and column 6, lines 1-15. Phaal teaches the idea of admitting new messages from users during a session-in-progress if resources are available. At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the conferencing services of Hebert et al. with the method of Phaal of admitting new users if resources are available. One of ordinary skill in the art would be motivated to do so in order to accommodate several users and for efficient use of resources.

Regarding claim 8, Hebert et al. disclose all the limitations of the claims except for assigning maximum available capacity to a dynamic conference. Phaal discloses a session-in-progress between users and the users with priority receiving the maximum available capacity

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while non-priority users are deferred and their messages not transmitted. Phaal teaches the idea of assigning maximum available resources to a certain group, in this case priority communication between users and a host. See column 5, lines 58-67 and column 6, lines 1-15. At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the conferencing services of Hebert et al. with the method of Phaal of assigning maximum resources to a dynamic conference. One of ordinary skill in the art would be motivated to do so in order to accommodate several users and for efficient use of resources.

Regarding claim 9, Hebert et al. disclose all the limitations of the claims except for having as many channels as possible such that conference can grow as large as possible and that channels remain available for participants who join the conference in progress. Phaal discloses a session in progress between a host side (Figure 1, element 15) and a client side (element 13) including individual personal computers each with a user. For newly received messages from additional users, not a part of the already established session, the resource monitor (element 27) determine whether messages can be admitted if the resources are available and the admission control gateway (element 25) admits the messages if there available time slots. See column 5, lines 17-27, lines 58-67 and column 6, lines 1-15. Phaal discloses a session-in-progress between users and users with priority receiving the maximum available capacity while non-priority users are deferred and their messages not transmitted. Phaal teaches the idea of assigning maximum available resources to a certain group, in this case priority communication between users and a host. See column 5, lines 58-67 and column 6, lines 1-15. At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the conferencing services of Hebert et al. with the method of Phaal of assigning maximum resources to a

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conference in progress so additional participants can join. One of ordinary skill in the art would be motivated to do so in order to accommodate several users and for efficient use of resources.

Regarding claim 10, Hebert et al. disclose all the limitations of the claims except for defining a critical conference as a conference that requires maximum opportunity or growth in system. Phaal discloses a session-in-progress between users and users with priority receiving the maximum available capacity while non-priority users are deferred and their messages not transmitted. Phaal teaches the idea of assigning maximum available resources to a certain group, in this case priority communication between users and a host so additional users can be added using the available resources and non-priority communication do not have access to resources. See column 5, lines 58-67 and column 6, lines 1-15. At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the conferencing services of Hebert et al. with the method of Phaal of assigning maximum resources to a group for maximum growth in system. One of ordinary skill in the art would be motivated to do so in order to accommodate several users and for efficient use of resources.

Regarding claim 11, Hebert et al. disclose all the limitations of the claim except for the selecting for critical conference the maximum available capacity and establish conference and block other conferences from being assigned such that capacity remains available for critical conference. Phaal discloses a session-in-progress between users and users with priority receiving the maximum available capacity while non-priority users are deferred and their messages not transmitted. Phaal teaches the idea of assigning maximum available resources to a certain group, in this case priority communication between users and a host so additional users can be added using the available resources and non-priority communication do not have access to

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resources. See column 5, lines 58-67 and column 6, lines 1-15. At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the conferencing services of Hebert et al. with the method of Phaal of assigning maximum resources to priority messages and blocking non-priority messages to server. One of ordinary skill in the art would be motivated to do so in order to accommodate several users, for efficient use of resources and quality of service.

Regarding claim 12, Roy discloses all the limitations of the claims except for revealing blocked channels after critical conference is finished. Phaal discloses deferral manager (Figure 1, element 31) sending message (element 33) to user(s) of client system informing of deferment and deferral manager along with scheduler (element 35) calculating time for deferred message to be admitted by user to server when priority communication is finished and generating cookie for the client system for the admission control system to recognize client as deferred user. See column 16-29 and lines 50-55. Phaal teaches the idea of maintaining information regarding deferred users and allowing admission of messages by non-priority users once priority communication is finished. At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the conferencing services of Hebert et al. with the method of Phaal of admitting deferred non-priority messages to server once priority communication is over. One of ordinary skill in the art would be motivated to do so for efficient use of resources and quality of service.

5. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hebert et al. and Phaal in view of Roy US 6,324,169.

Hebert et al. and Phaal disclose all of the limitations except for assigning a static conference to a DSP circuit on a "best-fit" basis. Roy discloses conference call by calling computer (Figure 1, element 1-1) to called computers (elements 1-2 and 1-4) including quality of service requirements where there are different service levels such as "best effort service" for priority level 2 resources. At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify conferencing services of Hebert et al. and Phaal with best effort service of Roy. One of ordinary skill in the art would be motivated to do this for efficient use of resources.

Allowable Subject Matter

6. Claims 3, 6, 15-16 and 18-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Prior art of record does not, in single or in combination, disclose employing statistical analysis and/or historical data about past system conference behavior in statistical analysis to predict conference type, providing telecommunications system with a line-to-switch data bus comprised of multiple individual bus conductors, each bus conductor carrying time slots coming into node from line cards, including T1 line cards, system also including switch-to-line data bus with multiple individual bus conductors that carry time slots of PCM-encoded data from nodal switch in the node back out to a destination line card, identifying a zone of time slots having the lowest order of allocation such that it is at least likely to be taken when a new T1 card is inserted into system during operation, and assigning a conferencing node to use these lowest orders of

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allocation time slots for a requested conference, allocating zones of time slots such that 192 time slots of a T1 span are divided into segments.

Response to Arguments

7. Applicant's arguments with respect to claims 2,3,5-19 have been considered but are moot in view of the new ground(s) of rejection.

Regarding claims 7-14, Applicants argue reference Phaal does not teach conferencing of multiple users simultaneously in one conference as described by Applicants. Applicants argue that although Phaal does disclose prioritizing messages and reserving time slots for high priority clients, Phaal assigns appointments for some of the incoming messages at a later time thus not addressing conferencing of multiple users simultaneously in one conference. Examiner contends Phaal discloses a session in progress between a host side (Figure 1, element 15) and a client side (element 13) including individual personal computers each with a user, thus disclosing multiple users conferencing simultaneously. For newly received messages from additional users, not a part of the already established session, the resource monitor (element 27) determines whether messages can be admitted if the resources are available and the admission control gateway (element 25) admits the messages if there available time slots. See column 5, lines 17-27, lines 58-67 and column 6, lines 1-15. Phaal teaches the idea of admitting new messages from users during a session-in-progress if resources are available and high priority users will be allocated resources before others.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6,603,757 Locascio discloses voice data access concentrator.

US 6,526,050 Hebert et al. disclose programming call-processing application in a switching system.

US 6,463,056 Mishra et al. disclose arrangement for providing network protocol data independence in an expandable telecommunication system.

US 6,389,024 Ghai et al. disclose flexible call routing system.

US 6,226,288 Allen disclose sub-rate switching telecommunication switch.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period


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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Jagannathan whose telephone number is 571-272-3163. The examiner can normally be reached Monday-Friday 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3163.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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